



App. No. 09/933,862

Reply to Office Action of May 24, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A method of processing a video including football comprising:
 - (a) identifying a plurality of segments of said video based upon an event, wherein said event is characterized by a start time based upon when the ball is put into play and an end time based upon when the ball is considered out of play, where each of said segments includes a plurality of frames of said video; and
 - (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.
2. (Original) The method of claim 1 wherein said event is defined by the rules of football.
3. (Original) The method of claim 1 wherein said start time is temporally proximate a hike.
4. (Original) The method of claim 1 wherein said end time is temporally proximate a tackle of a player with the ball.
5. (Original) A method of processing a video including football comprising:
 - (a) identifying a plurality of segments of said video, where each of said segments includes a plurality of frames of said video, based upon a series of activities defined by the rules of football that could potentially result in at least one of:
 - (i) a score;
 - (ii) preventing a score;

- (iii) advancing a team toward a score;
 - (iv) preventing advancing a team toward a score; and
 - (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.
- 6. (Original) The method of claim 5 wherein said summarization of said plurality of segments is in the same temporal order as said plurality of segments within said video.
- 7. (Original) The method of claim 5 wherein said activities are determined based upon the color characteristics of said video.
- 8. (Withdrawn) The method of claim 5 wherein said activities are determined based upon scene changes.
- 9. (Original) A method of processing a video including football comprising:
 - (a) identifying a plurality of segments of said video based upon detecting a play of said football game, wherein said identifying includes detecting the start of said play and detecting the end of said play, where each of said segments includes a plurality of frames of said video; and
 - (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.
- 10. (Original) The method of claim 9 wherein said detecting the end of said play is based upon detecting said start of said play.
- 11. (Original) The method of claim 9 wherein said summarization identifies said plurality of segments of said video.

12. (Original) The method of claim 9 wherein said summarization is a summarized video comprising said plurality of segments excluding at least a portion of said video other than said plurality of segments.
13. (Original) The method of claim 9 wherein said start is temporally close to the hike of the ball.
14. (Original) The method of claim 9 wherein said end is temporally close to a tackle of a player with the ball.
15. (Original) A method of processing a video including football comprising:
 - (a) identifying a plurality of segments of said video, wherein the start of said plurality of segments is identified based upon detecting at least one spatial region of a generally green color, where each of said segments includes a plurality of frames of said video; and
 - (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.
16. (Original) The method of claim 15 further comprising said spatial region having a substantially straight border.
17. (Withdrawn) The method of claim 15 further comprising said spatial region having a pair of substantially parallel edges.
18. (Original) The method of claim 15 further comprising said spatial region being centrally located within said frame.

19. (Original) The method of claim 15 wherein said generally green color is modified during said processing of said video.
20. (Original) The method of claim 15 wherein said generally green color is calculated based on the video and has a smaller gamut than an initial generally green color from which said generally green color is calculated based upon.
21. (Original) A method of processing a video including football comprising:
 - (a) identifying a plurality of segments of said video, wherein the start of said plurality of segments is identified based upon detecting at least one spatial region of a generally brown color, where each of said segments includes a plurality of frames of said video; and
 - (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.
22. (Original) The method of claim 21 further comprising said spatial region having a substantially straight border.
23. (Withdrawn) The method of claim 21 further comprising said spatial region having a pair of substantially parallel edges.
24. (Original) The method of claim 21 further comprising said spatial region being centrally located within said frame.
25. (Original) The method of claim 21 wherein said generally brown color is modified during said processing of said video.

26. (Original) The method of claim 21 wherein said generally brown color is calculated based on the video and has a smaller gamut than an initial generally brown color from which said generally green color is calculated based upon.

27-41. (Canceled).

42. (Original) A method of processing a video including football comprising:
(a) identifying a plurality of segments of said video, wherein the start of said plurality of segments is identified based upon identifying a plurality of lines on a background primarily of a generally green color, where each of said segments includes a plurality of frames of said video; and
(b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

43. (Original) The method of claim 42 wherein said lines are generally white.

44. (Original) The method of claim 43 wherein at least three of said lines intersect at substantially the same location.

45. (Original) The method of claim 42 wherein said generally green color is calibrated based upon said video.

46-64. (Canceled).

65. (Original) A method of processing a video including football comprising:
(a) identifying a plurality of segments of said video, where each of said segments includes a plurality of frames of said video;
(b) identifying a plurality of segments that are temporally separated by a sufficiently short duration;

- (c) based upon said identifying as a result of (b) connecting said identified plurality of segments; and
 - (d) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.
66. (Original) The method of claim 65 wherein said connecting includes discarding the frames of said video between said identified plurality of segments.
67. (Original) The method of claim 65 wherein said connecting results in a single segment that includes said identified plurality of segments together with the frames of said video between said identified plurality of segments.
68. (Original) A method of processing a video including football comprising:
- (a) identifying a plurality of segments of said video, where each of said segments includes a plurality of frames of said video;
 - (b) identifying at least one of said segments that has a temporally sufficiently short duration;
 - (c) based upon said identifying as a result of (b) removing said identified segment from said summarization; and
 - (d) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.
69. (Original) The method of claim 68 wherein said connecting includes discarding the frames of said video between said identified plurality of segments.
70. (Original) The method of claim 68 wherein said connecting results in a single segment that includes said identified plurality of segments together with the frames of said video between said identified plurality of segments.

71-73. (Canceled).

74. (Original) A method of processing a video including football comprising:

- (a) identifying a plurality of segments of said video wherein each of said segments includes a play of football;
- (b) detecting a commercial within said video;
- (c) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video, where said plurality of segments of said video sufficiently temporally close to said commercial are free from being included within said summarization.

75. (Canceled).

76. (Original) A method of processing a video including football comprising:

- (a) identifying a plurality of segments of said video wherein each of said segments includes a play of football;
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video; and
- (c) removing at least one of said segments from said summary based, at least in part, upon audio information related to said at least one of said segments.

77. (Original) The method of claim 76 wherein said audio information is obtained exclusively from a temporal analysis.

78. (Original) A method of processing a video including football comprising:

- (a) identifying a plurality of segments of said video wherein each of said segments includes a play of football;
 - (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video; and
 - (c) modifying the duration of at least one of said segments from said summary based, at least in part, upon audio information related to said at least one of said segments.
79. (Original) The method of claim 78 wherein said audio information is obtained exclusively from a temporal analysis.
80. (Original) A method of processing a video comprising:
- (a) providing a description of said video;
 - (b) identifying a plurality of segments of said video based upon said description;
 - (c) generating another video based upon said identified segments, wherein said another video has less frames than said video.
81. (Original) The method of claim 80 wherein said video is transcoded in accordance with the channel capacity of a transmission medium.
82. (Original) The method of claim 80 wherein said video is transcoded in accordance with the storage capacity of a storage device.
83. (Original) The method of claim 80 wherein said description is compliant with MPEG-7 standard.
84. (Original) The method of claim 80 wherein said description is compliant with TV-Anytime standard.

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85-90. (Canceled).